Preliminary Classification:

Proposed Class:

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Director of the U.S. Patent and Trademark Office Mail Stop PATENT APPLICATION P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Hannu VENTOMÄKI

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(l) is filed supplying or changing the name or

names of the inventor or inventors."

For (title): Method and System for Detecting Electronic Component Failures

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, <u>March 30, 2004</u>, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number <u>EV 435647900 US</u>, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

> Annemarie Maher (typ_₽or print name of person mailing paper)

Signature of person mailing paper

WARNING:

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

1. Type of Application This new application is for a(n) (check one applicable item below) Original (nonprovisional) Design □ Plant **WARNING:** "Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application. WARNING: Do not use this transmittal for the filing of a provisional application. If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION. Divisional Continuation Continuation-in-part (C-I-P)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		G:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).					
			The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.					
3.	Pap	ers	Enclosed					
	 A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F. 1.153 (Design) Application 15 Pages of specification 4 Pages of claims 3 Sheets of drawings 							
	WA	RNIN	IG: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).					
	NOTE:		"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).					
			(complete the following, if applicable)					
			The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).					
			The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b).					
		X	formal informal					
	В.	Oth	ner Papers Enclosed					
 O Pages of declaration and power of attorney 1 Pages of abstract O Other 		ges of abstract						
4.	Add	ditio	onal papers enclosed					
		Am	endment to claims					
	☐ Cancel in this application claims before the filing fee. (At least one original independent claim must be re filing purposes.)							
		bee	d the claims shown on the attached amendment. (Claims added have an numbered consecutively following the highest numbered original ims.)					

		Preliminary Amendment							
		Information Disclosure Statement (37 C.F.R. § 1.98)							
		Form PTO-1449 (PTO/SB/08A and 08B)							
		Cita	Citations						
		Dec	Declaration of Biological Deposit						
		am	endr	sion of "Sequence Listing," computer readable copy and/or ment pertaining thereto for biotechnology invention containing ide and/or amino acid sequence					
			Authorization of Attorney(s) to Accept and Follow Instructions from Representative						
		Spe	ecial	Comments					
		Oth	er						
5.	Dec	clara	atio	or oath (including power of attorney)					
NOTE:		A net that bein matta applicate under decir in a	A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).						
NOTE:		whice give resid	A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).						
NOTE:		"The inventorship of a nonprovisional application is that inventorship set forth in the oath declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovision application, the inventorship is that inventorship set forth in the application papers filed pursue to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17 is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. 1.41(a)(1).							
			End	closed					
			Exe	ecuted by					
				(check all applicable boxes)					
				inventor(s).					
				legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.					
			□ inve	joint inventor or person showing a proprietary interest on behalf of entor who refused to sign or cannot be reached.					
				This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee.					
		X	Not	Enclosed					

NO:	TE:	com App may	pletion lication be, u	of filing is a completion in the U.S. of an International Application or where the of the U.S. application contains subject matter in addition to the International in the application may be treated as a continuation or continuation-in-part, as the case cilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT U.S. APPLICATION CLAIMED.
				Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).
(The	dec	laratio	on or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
				☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6.	lnv	ento	orshi	o Statement
WARNING		IG:	the o	named inventors are each not the inventors of all the claims an explanation, including whership of the various claims at the time the last claimed invention was made, should bmitted.
The	e inv	ento	rship	for all the claims in this application is:
	×	The	e sam	e.
				or
				came. An explanation, including the ownership of the various claims ne the last claimed invention was made,
			is su	bmitted.
			will b	e submitted
7.	Laı	ngua	age	
NO	TE:	Eng of \$	lish. A 130.00	tion including a signed oath or declaration may be filed in a language other than in English translation of the non-English language application and the processing fee required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within as may be set by the Office. 37 C.F.R. § 1.52(d).
		☒		English Non English
				Fhe attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).
8.	As	sign	ment	
		X	An a	ssignment of the invention to Nokia Corporation
			(s attached. A separate "COVER SHEET FOR ASSIGNMENT DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or FORM PTO 1595 is also attached.
			X v	vill follow.
NO	TE:			gnment is submitted with a new application, send two separate letters-one for the and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).

(New Application Transmittal [4-1] page 5 of 11)

ANAKIAII	4 G.	continuati 62-64.	on-in-part app	lication is filed by	an ass	ignee. Notice	of April 30,	1993, 1150 OG
				l divisional ap /				
						Reel_		
							e	
9. Ce	ertifie	ed Copy						
Ce	ertifie	d copy(ie	s) of applic	ation(s)				
Co	ountry	/		Appli	n. No.			Filed
Co	ountry	/		Appli	n. No.			Filed
from w	hich	priority is	s claimed:					
		is (are) will follo	attached. w.					
NOTE: NOTE:	or d This pare und item	eclaration. s item is fo ent U.S. ap er 35 U.S.0 n 18 on the	37 C.F.R. § 1. r any foreign poplication or In C. § 120 is itse ADDED PAGE	ng the basis for the 55(a) and 1.63. Poriority for which international Applied entitled to prioring FOR NEW ADN(S) CLAIMED.	the app cation t	olication being from which the a prior foreig	filed directl is application	y relates. If any on claims benefit on, then complete
10. Fe	e Ca	lculation	1 (37 C.F.R	. § 1.16)				
A.	X	Reg	jular applica	ation				
				CLAIMS AS	FILE)		
Numbe	er file	ed		Number Extr	a	Rate	37 C.F.	Basic Fee R. § 1.16(a) \$770.00
Total ((37 C.I) 29 - 20 =	9	х	\$18.00 =		162.00
		nt Claims § 1.16(b)		0	х	\$86.00 =		
		pendent o			+	\$290.00		
		Amendr	ment deletin	ling extra clain ig multiple-dep s is not being p	ender	ncies is enc	losed.	
NOTE:	ame	endment, p	prior to the ex	re not paid on fil opiration of the to ce of fee deficience	ime pei	riod set for re	esponse by	•
		Filir	ng Fee Cald	culation			\$_	932.00

(New Application Transmittal [4-1] page 6 of 11)

	B.		Design applicatio (\$310.00 – 37 C.I		
			F	Filing Fee Calculation	\$
	C.		Plant application		
			(\$480.00 - 37 C.F	F.R. § 1.16(g))	
			F	Filing Fee Calculation	\$
11. Sm	all E	Entit	y Statement(s)		
			ent(s) that this is a (are) attached.	a filing by a small entity under	37 C.F.R. §§ 1.9 and
WARNIN	G:	whice pate whice has divise 1.53 entite appliant to the in the desired which which the desired which which the second which which the second which whi	th the status is available to does not affect and the are directly or indirectly or indirectly or continuation-indirectly or the filing of a lement to small entity lication claiming benefication, or a reissue all e patent if the nonproversatement in the prices of the programment of the payment of the payment of the control of the payment of the control of the payment of the payment of the prices.	must be specifically established in e- ble and desired. Status as a small by other application or patent, includ- ctly dependent upon the application of the refiling of an application under n-part (including a continued prose- reissue application requires a new de- status for the continuing or reissue ap- fit under 35 U.S.C. § 119(e), 120, pplication may rely on a statement file visional application or the reissue app- or application or in the patent or inclu- tion in the patent and status as a small the small entity basic statutory filing for this section." 37 C.F.R. § 1.28(a)(2).	entity in one application or ling applications or patents or patent in which the status § 1.53 as a continuation, cution application under § termination as to continued oplication. A nonprovisional 121, or 365(c) of a prior ed in the prior application or lication includes a reference des a copy of the statement all entity is still proper and
WARNIN	G:	"Sma state ed.,	rev. 2, July 1996 (emp	·	•
			•	plete the following, if applicable	
				entity was claimed in prior ap	
			benefit is being c	, filed on laimed for this application und	, from which er:
			- 0	☐ 119(e), ☐ 120, ☐ 121, ☐ 365(c), atus as a small entity is still pro	oper and desired.
			☐ A copy of	f the statement in the prior app	olication is included.
			Filing Fee	e Calculation (50% of A, B, or	C above)
				\$	
NOTE:	ai no	re file ot ext	d within 2 months of t endable under § 1.136	d will be refunded if a small entity state the date of timely payment of a full fest. 37 C.F.R. § 1.28(a).	e. The two-month period is
			(co	omplete, if applicable)	
				ational-type search report for ination on the merits takes pla	

(New Application Transmittal [4-1] page 7 of 11)

13. Fee Payment Being Made at This Time ☑ Not Enclosed No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can be paid ☐ Enclosed □ Filing fee Recording assignment (\$40.00 - 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING **NEW APPLICATION.")** Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i)) □ For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k)) Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l)) ☐ Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e)) NOTE: 37 C.F.R. § 1.21(I) establishes a fee for processing and retaining any application that is abandoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, as well as the changes to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(I) must be paid, within 1 year from the notification under § 53(f). Total fees enclosed 14. Method of Payment of Fees ☐ Attached is a ☐ check ☐ money order in the amount of \$_____ ☐ Authorization if hereby made to charge the amount of \$_____ to Deposit Account No. __ to credit card as shown on the attached credit card information authorization form PTO-2038 ☐ Charge any additional fees required by this paper or credit any overpayment the manner authorized above. A duplicate of this transmittal is attached.

Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37

NOTE:

C.F.R. § 1.22(b).

15. Authorization to Charge Additional Fees

WARNING:		ii no lees are to be paid on hilling, the following items should <u>not</u> be completed.					
WARNING:		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.					
		The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No					
			37 C.F.R. § 1.16(a), (f), or (g) (filing fees) 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims)				
NOTE:	pres the 1.16	entat time (d)),	additional fees for excess or multiple dependent claims not paid on filing or on later tion must only be paid or these claims canceled by amendment prior to the expiration of period set for response by the P.T.O. in any notice of fee deficiency (37 C.F.R. § it might be best not to authorize the P.T.O. to charge additional claim fees, except when dealing with amendments after final action.				
			37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)				
			37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))				
			37 C.F.R. § 1.17 (application processing fees)				
WARNIN	G:	cond for it leng requ time para treat petit	A written request may be submitted in an application that is an authorization to treat any current or future reply, requiring a petition for an extension of time under this paragraph is timely submission, as incorporating a petition for extension of time for the appropriate of the of time. An authorization to charge all required fees, fees under § 1.17, or all uired extension of time fees will be treated as a constructive petition for an extension of a in any concurrent or future reply requiring a petition for an extension of time under this agraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be ted as a constructive petition for an extension of time in any concurrent reply requiring a tion for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 36(a)(3).				
			37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))				
NOTE:	mail	ing o	n authorization to charge the issue fee to a deposit account has been filed before the of a Notice of Allowance, the issue fee will be automatically charged to the deposit at the time of mailing the Notice of Allowance. 37 C.F.R. § 1.311(b).				
to s i. be i		7 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement is small entity status must be filed in the application prior to paying, or at the time of paying, issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.					

16. Instructions as to Overpayment

Customer No. 004955

NOTE:	a n doll	easonable time, nor will the payer be noti	ot be returned unless specifically requested within fied of such amounts; amounts over twenty-five sted, by credit to a deposit account." 37 C.F.R. §
		Credit Account No	<u> </u>
		Refund	
Date:	Mar	ch 30, 2004	May (1)
Reg. N	10.	27,550	SIGNATURE OF PRACTITIONER
Tel. No	o. (2 (03) 261-1234	Alfred A. Fressola (type or print name of practitioner
			Ware, Fressola, Van Der Sluys & Adolphson, LLP
			P.O. (Correspondence) Address
			Building Five, Bradford Green

Monroe, CT 06468

	Inc	Incorporation by reference of added pages (check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.)							
	prio sta the								
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed							
	_	Number of pages added							
		Plus Added Pages for Papers Referred to in Item 4 Above							
		Number of pages added							
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.							
		Number of pages added							
		Plus "Assignment Cover Letter Accompanying New Application"							
		Number of pages added							
×	Statement Where No Further Pages Added								
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.							
	XI	This transmittal ends with this nage							